

Title (en)

A PRODUCTION LINE AND A METHOD OF SHAPING PROFILES

Title (de)

FERTIGUNGSLINIE UND VERFAHREN ZUM FORMEN VON PROFILEN

Title (fr)

LIGNE DE PRODUCTION ET PROCÉDÉ DE FORMAGE DE PROFILÉS

Publication

EP 1877205 B1 20141001 (EN)

Application

EP 06733312 A 20060424

Priority

- SE 2006000456 W 20060424
- SE 0500954 A 20050428

Abstract (en)

[origin: WO2006115447A1] Profiles (50) are formed in a production line with a cross-section that varies along their length from a plane metal strip (10) that is unwound from a tape reel (9), whereby edge cutters (14) and a number of roll-forming units (17-24) are used where not only the edge cutters but also the roll-forming units can be displaced individually sideways relative to the strip. The edge cutters (14) and the roll-forming units (17-24) are individually controlled. The formed profile is curved in a curving station integrated into the line, which curving station comprises roller pairs (82, 84; 83, 85) that can be controlled to roll sides of the profile (50) such that they become thinner such that the profile is curved or twisted as it is formed. The roller pairs and the sideways displacement and the angular motion of the roll-forming units are controlled by the same computer program such that the roller pairs follow the sides and such that a line (II) between the axles of one roller pair is held always perpendicular to the surface being rolled.

IPC 8 full level

B21D 5/08 (2006.01); **B21D 11/08** (2006.01)

CPC (source: EP KR SE US)

B21D 5/08 (2013.01 - KR); **B21D 5/083** (2013.01 - EP SE US); **B21D 5/14** (2013.01 - KR); **B21D 11/08** (2013.01 - EP US)

Cited by

WO2018147773A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2006115447 A1 20061102; BR PI0610981 A2 20100810; BR PI0610981 B1 20190424; CA 2604626 A1 20061102; CA 2604626 C 20130813; CN 101166586 A 20080423; CN 101166586 B 20120808; CY 1115881 T1 20170426; DK 1877205 T3 20150112; EP 1877205 A1 20080116; EP 1877205 A4 20130828; EP 1877205 B1 20141001; ES 2526615 T3 20150113; JP 2008539083 A 20081113; JP 5033120 B2 20120926; KR 101470884 B1 20141209; KR 20080000653 A 20080102; PL 1877205 T3 20150331; PT 1877205 E 20150105; RU 2007137019 A 20090610; RU 2402396 C2 20101027; SE 0500954 L 20060214; SE 527352 C2 20060214; SI 1877205 T1 20150227; US 2009025446 A1 20090129; US 8650923 B2 20140218

DOCDB simple family (application)

SE 2006000456 W 20060424; BR PI0610981 A 20060424; CA 2604626 A 20060424; CN 200680014147 A 20060424; CY 141101086 T 20141229; DK 06733312 T 20060424; EP 06733312 A 20060424; ES 06733312 T 20060424; JP 2008508790 A 20060424; KR 20077026708 A 20071116; PL 06733312 T 20060424; PT 06733312 T 20060424; RU 2007137019 A 20060424; SE 0500954 A 20050428; SI 200631869 T 20060424; US 91870506 A 20060424